

Urban traffic and the stress factors perceived by bus drivers: a phenomenological study

O trânsito urbano e os fatores estressantes percebidos por motoristas de ônibus: estudo fenomenológico El tráfico urbano y los factores estresantes percibidos por los conductores de autobuses: un estudio descriptivo fenomenológico

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ABSTRACT

Objective: to discuss the experience of bus drivers through their perceptions regarding traffic and the health impacts they suffer. **Method:** in this qualitative phenomenological study conducted at a bus garage in Rio de Janeiro, data were collected in 2017 and 2018 by way of phenomenological interviews of 24 drivers, who answered semi-structured questions. The resulting mp3 recordings were later transcribed to obtain the units of meaning. The project was approved by the research ethics committee. **Results:** from phenomenological analysis of the units of meaning in the responses, two categories emerged: *traffic is unstable and stressful*, and *people's lack of education has adverse psychological effects*. The work environment substantially determines the well-being of those working in it. **Conclusion:** given all the many constraints imposed by contemporary society and by their suffering at work, it is necessary to motivate them and also assure them the conditions necessary to carry out their work fully.

Descriptors: Nursing; Occupational Health; Automobile Driving; Stress, Psychological.

RESUMO

Objetivo: discutir as vivências dos motoristas de ônibus através de suas percepções acerca do trânsito e os impactos à saúde sofridos por eles. **Método:** estudo qualitativo fenomenológico realizado em uma garagem de ônibus situada no Rio de Janeiro. As entrevistas fenomenológicas foram realizadas com 24 motoristas que responderam perguntas semiestruturadas e foram gravadas em dispositivo mp3, posteriormente, transcritas para obtenção das unidades de significado, a coleta de dados ocorreu entre 2017 e 2018. O projeto foi aprovado por Comitê de Ética e Pesquisa. **Resultados:** da análise fenomenológica das unidades de significados dos depoimentos emergiram duas categorias: o trânsito é instável e estressante e a falta de educação das pessoas afeta os aspectos psíquicos. O ambiente de trabalho determina, expressivamente, o bem-estar dos trabalhadores que nele atuam. **Conclusão:** diante de tantos limites impostos pela sociedade contemporânea e pelo sofrimento no trabalho, necessário é motiva-los, e também dar-lhes condições de realizar seu trabalho de forma plena.

Descritores: Enfermagem; Saúde do Trabalhador; Condução de Veículo; Estresse Psicológico.

RESUMEN

Objetivo: discutir la experiencia de los conductores de autobuses a través de sus percepciones sobre el tráfico y los impactos en la salud que sufren. Método: en este estudio fenomenológico cualitativo realizado en un garaje de autobuses en Río de Janeiro, se recopilaron datos en 2017 y 2018 a través de entrevistas fenomenológicas a 24 conductores, que respondieron preguntas semiestructuradas. Las grabaciones mp3 resultantes se transcribieron posteriormente para obtener las unidades de significado. El proyecto fue aprobado por el comité de ética de investigación. Resultados: del análisis fenomenológico de las unidades de significado en las respuestas, surgieron dos categorías: el tráfico es inestable y estresante, y la falta de educación de las personas tiene efectos psicológicos adversos. El ambiente de trabajo determina sustancialmente el bienestar de quienes trabajan en él. Conclusión: dadas las muchas restricciones impuestas por la sociedad contemporánea y por su sufrimiento en el trabajo, es necesario motivarlos y también asegurarles las condiciones necesarias para llevar a cabo su trabajo plenamente. Descriptores: Enfermería; Salud Laboral; Conducción de Veículo; Estrés Psicológico.

INTRODUCTION

Working in urban transport can change an individual's health status, as the work requirements are a threat to the worker himself¹. The conditions imposed on the driver's body on a daily basis, such as high temperatures, mismatches of seats in relation to the driver's height, extensive traffic jams and not drinking water for hours, disfavor health promotion for such workers². In addition, life conditions and living with the social and work environments influence people's health statuses, as they can trigger the onset of diseases and/or psychological changes.

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There are many health determinants that constitute a person's life condition as a worker³. Important factors are: social relationships in the workplace, food, housing, sanitation, education, transportation and leisure. These can directly or indirectly influence health.

The way of driving and the structure of public transport buses are the same worldwide, and the bus driver's profession occurs with the combination of personal skills⁴, attention and the social sphere; the work is individual, but the responsibility is collective. Learning to understand the perception experienced by bus drivers favors not only the drivers themselves, but it also enables the recognition of their needs and symptoms; the visibility of traffic impacts on these professionals allows us to listen to them and provide space to understand what they experience in their daily lives, and from their discourse, we can learn about their needs and suffering.

Stress is an aggravating factor for drivers' dissatisfaction with their profession. Disregard for ergonomics alters the workers' cognitive and physiological dimensions. The World Health Organization (WHO) has recognized it as a risk factor, for example, for arterial hypertension⁵.

Bus companies have psychologists on their staff who are responsible for people management as well as acting in motivational and behavioral training. And in the medical sector of companies, nurses and nursing technicians provide care related to occupational health in admission and dismissal processes.

Psychological care is not offered in the organizational logic and nor is nursing care provided. It is known that daily life in public transport is dynamic⁶ and demands a lot from the drivers' body and psyche. In this study, the driver is prioritized, since he is the company's "image" and what drives the population and the organization's productivity. Not considering his subjectivity can consequently induce illness in these workers.

The relevance of the study lies in giving voice to the driver who daily experiences the condition of moving around the city, who becomes socially invisible and often disrespected. Therefore, the need to understand what this public transport professional says and his perceptions is justified. Thus, the present study aimed to discuss the experiences of bus drivers through their perceptions of traffic and the health impacts that they suffer.

LITERATURE REVIEW

Human existence is marked by its conscience. The expression "being in the world" (or personification) is a concept that recognizes people's physical connections with their world⁷ - in the daily life of urban mobility, drivers' conscience works and impacts their corporeality.

Phenomenological research is a translation of phenomena from those who experience it, in their daily lives. In *epoché*, the individual moves away from the study hypotheses precisely in order to not direct the possible results or suggest the way; after all, it is the description and repetition of the phenomena that allows researchers to see the direction that the phenomenon is showing⁸.

Driving is an extension of drivers' internal processes. The difficulty in elaborating emotions on a daily basis should not be overlooked; perception always exists in the "If" mode.

It is not a personal act by which I would give my life a new meaning. The one who, in sensory exploration, attributes a past to the present and guides it towards a future is not me as an autonomous subject, it is me while I have a body and while I know how "to look"⁷.

Physical and psychological health suffers impacts⁹ from limitations imposed on the body as well as from unspoken emotions. The exterior, at the same time, confirms it in its particularity, makes it visible as a partial being to the eyes of others and, at the same time, links it to the whole of Being⁶.

The experience of bus drivers is disregarded by organizational logic; they do not have an environment for psychological listening or therapeutic help. The worker's body, his corporactivity, sustains urban transport⁹, and, at the same time, it is invisible and not valued.

METHOD

This study is qualitative and phenomenological. As an inclusion criterion, professionals over 26 years old were considered, since the National Driver's License (CNH) for heavy vehicles can only be issued for individuals older than 21. It is understood that the public transport professional must take specific courses before actually being hired to transport people. Some of these courses require a minimum license period, which explains the age criterion in the study as well as the criterion that drivers should have been working in the profession for more than two years. Exclusion criteria included drivers who carried out other paid work and drivers who had been put on a sick leave for longer than two years by the National Institute of Social Security.



The study proposal was presented to the participants, and the Informed Consent Form was read and explained to them in order to guide any questions that should arise, according to the ethical and legal specifications of Resolution CNS $466/12^{10}$ by the Ministry of Health.

Data were collected by means of phenomenological interviews with a guiding question: How do you experience traffic?. Recorded on an mp3 player, the interviews took place between July 2017 and January 2018 in a private room provided by the Human Resources Department of the field-company, at a large bus garage on the east side of Rio de Janeiro City. The study proposal was presented to the drivers using the snowball method. Ninety drivers were invited, and 24 professionals answered the phenomenological interview questions individually. Their mean age was 41.6 years, and their mean length of work in the profession was 11 years. Data were analyzed by transcribing the interviews¹¹ and categorizing, following the assumptions of phenomenological descriptive methodology. The first step involved the careful reading of the transcripts of the interviews recorded from the study participants, with the purpose of reaching the meaning of the perception of what is experienced, apprehending the phenomenon in question and preserving the subject's language of expression. The second step corresponded to the identification of meanings described by the study participants that were spontaneously perceived by the researcher amid the transcriptions. The third step required the transformation of the participants' language into scientific language, maintaining the emphasis of the described phenomenon¹².

The last step was to synthesize and associate the units of meanings, thus reaching the core of the phenomenon's meaning. The study project was approved by the Ethics and Research Committee (CEP) of the School of Medicine of Universidade Federal Fluminense (UFF), CAAE no. 64110016.2.0000.5243. In order to ensure participants' anonymity, the letter E (for *entrevistado*, which means interviewee in Portuguese) and the order number of participation in the study were used. Example: E1, E2.

RESULTS AND DISCUSSION

From the analysis of the interviews, the following categories emerged: *The traffic is unstable and stressful* and *The lack of people's education affects psychic aspects*, which will be addressed below.

The traffic is unstable and stressful

The Brazilian reality regarding urban transport reveals the conditions of poor preservation and maintenance of buses¹³.

The psychological effects of work¹⁴ for bus drivers are inherent to physical demands. Negative emotions and the limitations experienced in daily life often flow to the driver's body.

Traffic instability and its effects on respondents:

It's something you can't predict, at a certain moment you are calm, and, at another, people do things they shouldn't do, cars cut in front of you, sometimes I have difficulties in traffic because there are other irresponsible people. (E1)

It is stressful because of picky passengers, it stresses the driver. (E3)

Sometimes I get stressed. I am that kind of person that [...] when I don't say what I mean [...], I keep brooding over that thing. [...] so, that's why I speak it out. [...] leave! That's really to get rid of the stress, cool, I have to get out of the car and get to the final stop. (E6)

Yeah, it's like this, "you won't let me go through, will you? Okay! When you ask me to let you through, I won't do it either. I will be bad to you too". (E7)

The traffic is a weapon, it's complicated, the traffic hurts, kills, amputates. (E9)

The traffic, today, could be better, more peaceful, less violent, but lately, we know, you know, these things that we are experiencing there, these tragedies. (E13)

My tension makes me apprehensive. I'm on all the time because anything can happen at any moment, (he snaps his fingers) like this, and you, with a big vehicle, the proportions are bigger (E15)

When I started working, I knew what I was going to face, the name says: traffic, facing good traffic, chaotic traffic, those people who want to cut off in front of you, pedestrians, cyclists, motorcyclists. (E16)

My experience in traffic is very stressful, especially during peak hours, everyone wanting to arrive at their work, everyone late, lack of education, one wanting to cut off in front of the other, nobody gives anyone a chance. (E22)

The traffic is a space; it is a system; it is social interaction; it is commuting that is composed of various transports, the bus being an instrument, the driver a worker, and the population its users. The traffic is the gathering of these aspects in action, in movement, in interaction.



For countless reasons, the traffic is no longer only a space for commuting, and now it has a connotation of chaos, of imminent danger, records of traffic jams, as a stressful condition that is inherent to urban life.

In the urban context, specifically in the city of Rio de Janeiro, with accentuated urban violence, bus drivers also face the stress caused by the imminence of an episode of insecurity generated by theft, gunfire and passengers' deaths in robberies, for example. Traffic congestion insecurity is great because the population, in protests, uses buses as a barrier to the passage of cars and set fire to the public vehicles motivated by urban violence.

If all the physical¹⁵ and social limitations felt by bus drivers were not enough, occupational psychological disorders are present in the daily lives of these workers.

The internal requirements of companies cause stress to professionals¹⁶, and their length of employment is related to the onset of stress, mood changes, general malaise for no specific reason and constant tiredness. Also, the excessive workload causes exhausting work hours and compromises bus drivers' bone joints, for example.

Interdisciplinary work in bus garages with occupational health support, aiming at health education with lectures, prevention and occupational health information and Psychology, in line with such preventive practices, can intervene in the signification of psychic demands, thus providing qualified and sensitized listening.

Motivational and skill-development training should be part of the routine of public transportation companies. Promoting workers' training prepares and contributes to mental health.

In the organizational view, the bus driver conducts the machine that he operates, but there is a need to consider the physical and psychological processes occurring in daily work. The professional's world includes a third responsibility: caring for the driver.

The representations of the drivers' psychic state emerge in a sensitive fashion. By looking ahead, they perceive themselves as being tired¹⁷ and nervous, and their movements inside the bus are points of impacts and parts of themselves at work, which cannot be expressed in language, returning to the world in the form of gestures, with changes in emotions.

People's lack of education affects psychic aspects

The difficult task of balancing the transport service and user satisfaction makes the relationship between the daily routine and satisfaction in the work context even more complex for professional drivers. It is a balance movement that requires efforts from all parties involved.

In the work context, it is essential to point out that the professionals' complaints did not permeate their working conditions or wages. The aspects for identifying the profession and the day-to-day routine in their activities are ways of operationalizing possible improvements regarding the other's view of work. The traffic space and drivers' behavior:

Brazilians don't have good manners in the traffic, do you understand? They think that, because they own a certain type of car, they also own the street; they think they're the best, they go through the red light. They cut off in front of you, they don't care, you know? (E4)

There's no respect. Nobody has good manners, no good manners in the traffic at all, and there's no respect, you know, people go through the red light. (E10)

Nowadays, I see the traffic, it is very chaotic in relation to good manners, in relation to the drivers' education. (E18)

Motorbike and car drivers, they don't care, they want to be the first, they don't care if they're going to crash, if they're going to be run over [...] it's easy to blame us for any damage that may happen. (E19)

When I see that moody passenger coming, I pretend I'm not looking. I look away. [...] I look at something else, kind of like this. So I won't have any problems. So I won't have any problems. Because, it's like this, my Psychology is to avoid problems. (E21)

In traffic, what I have noticed these years is that people are more individualistic, each one wants his space and rights, they don't understand that one's rights end where another's begin, nowadays, driving is very complicated. (E24)

If all the physical limitations felt by bus drivers around the world were not enough, common mental disorders are present in the daily lives of these workers. The lack of socio-cultural activities, the violence and aggressions from both passengers and other drivers change bus drivers' behavior and their psychic response cause mental symptoms to become chronic¹⁸. Working in public transport becomes an act of physical and mental resistance in the country's reality¹⁹.



The demands to which bus drivers are subjected go beyond the company, the body, the mind; they pervade individual education. In the reports described above, it is possible to understand that the affects of this experience are felt from the lack of education by the other drivers.

In their relationship with passengers²⁰, an inescapable part of the driving job, bus drivers experience a mixture of feelings, from the satisfaction of carrying out the work of driving people to their desired destinations to problems generated by incompatibility of opinions or accusations on both sides.

We are based on experience, but it pervades our subjectivity²². What was possible to understand about this category was that the relationship with traffic is not directly linked to the length of time working in the profession.

The way of dealing with the experience does not depend on the number of years during which the professionals have been working in their positions. Faced with the surprising conditions of their working hours, they need to reinvent themselves and deal with the most varied behaviors and conflicts.

The lack of studies that the very complexity of the phenomenological method imposes is understood as a limitation to the present investigation, since such method requires keen perception in order to change research data into phenomenological language.

CONCLUSION

Studies on bus drivers' lifestyles and the psychosocial factors to which they are subjected are necessary for a broader understanding of the ways in which these professionals react to the adversities of the profession.

When analyzing the studies, we understood that driving has several stressors: the intricate relationship with customers, the traffic itself, the often intense heat in the cabin, vehicle conditions, the drivers' health conditions during the workday and the intense workload.

The companies have no control over traffic, and bus drivers deal with numerous demands in their work; the relationships in the organization are inescapable. The demand to transport a certain number of passengers and goals to be achieved in terms of fuel use and its saving configure an organizational pressure, since the trips must not be delayed so as to guarantee the punctuality of the services provided to passengers.

Care must go beyond the body. Psychology has responsibilities that transcend Human Resources. In line with Nursing, the development of lectures and information leaflets is a tool for disseminating knowledge and promoting care. The nurse can be recognized for his/her ability to understand the need for care and build a humanized encounter, with qualified listening and collaborative partnership with the bus driver.

It is necessary to preserve the body as part of the work process and to change the organizational logic that prioritizes production and fails in caring for the worker. When productivity is the essence of work, its main factor, the human factor, is lost.

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